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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,079	03/30/2001	Errol C. Heiman	STL9524	6981
27365	7590	01/13/2006	EXAMINER	
SEAGATE TECHNOLOGY LLC C/O WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 - INTERNATIONAL CENTRE 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			LEROUX, ETIENNE PIERRE	
		ART UNIT		PAPER NUMBER
		2161		
DATE MAILED: 01/13/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/823,079	HEIMAN ET AL.
	Examiner	Art Unit
	Etienne P LeRoux	2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 28 September 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 18-36 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 18-36 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9/2005.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

***Claim Status:***

Claims 18-36 are pending; claims 1-17 and 37 have been canceled. Claims 18-36 are rejected as detailed below.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 18 recites “circuitry configured to introduce disturbances into the constant power supply voltage applied to the electronic device, a disturbance configured to simulate a disruption in the nominal power supply voltage.” The skilled artisan would deduce that applicant at the time the filing did not have possession of the invention because **simulation** (emphasis added) is not included in the specification. The skilled artisan would have considered the following excerpt from applicant’s specification:

**Summary of Invention Paragraph:**

[0005] Preventing damage from power disturbances in electronic devices is vital to the success of a product. If damaged from a power disturbance, a highly sensitive electronic device may be impaired from working properly. Some of the problems caused by power disturbances may

include hardware malfunctioning, integrated circuits being rendered ineffective, memory being rewritten or lost, software and firmware erased, or data may be lost. If an electronic device is damaged by a power disturbance, the product will probably have to be completely replaced. Thus, there clearly exists a need to test the design capabilities of an electronic device to discern if the device is capable of handling the power disruptions for which it may encounter.

The above paragraph does not describe how a skilled artisan can use a disturbance to simulate a disruption. The above paragraph does not describe how the skilled artisan should “configure” a disturbance. The skilled artisan would deduce that there is no difference between “disturbance” and “disruption” because applicant uses disturbance and disruption interchangeably.

Claim 28 includes language similar to the above and is rejected for reasons similar to the above.

Claims 19-27 and 29-36 are rejected for being dependent from a rejected base claim.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18, 20, 22, 24-28, 30, 32 and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 4,639,916 issued to Bouterin et al (hereafter Bouterin).

#### Claims 18 and 28:

Bouterin discloses:

a power source supplying the constant power supply voltage at the nominal power supply voltage of the electronic device [stabilized power supply 50, 51, Fig 1, col 4, lines 38-45]

a connector coupled to the power source, the connector adapted to connect the constant power supply voltage to a power supply input on the electronic device [Fig 1, 20, 21, col 3, lines 60-67].

circuitry configured to introduce disturbances into the constant power supply voltage applied to the electronic device, a disturbance configured to simulate disruption in the nominal power supply voltage; wherein the disturbances introduced into the constant power supply voltage applied to the electronic device are controllable [Fig 1, Fig 2, col 5, lines 30-65, col 10, 40-68]

Claims 20 and 30:

Boutterin discloses wherein the disturbance is a low-going pulse having a minimum voltage being less than the nominal power supply voltage [col 10, line 58 through col 11, line 2]

Claim 22 and 32:

Boutterin discloses an additional power source supplying an additional voltage wherein the additional power source is adapted to connect the additional voltage to an additional connector [Fig 1, col 4, lines 38-43]

Claims 24 and 34:

Boutterin discloses a manually operated user interface used to control the disturbances [col 3, lines 14-17].

Claims 25 and 36:

Boutterin discloses wherein the disturbance is a plurality of pulses and a frequency and a number of pulses in the plurality of pulses are controllable [COUPURE col 5, line 40]

Claim 26 and 35:

Boutterin discloses wherein the disturbance is at least one pulse having a duration and a magnitude which are controllable [Fig 1, col 10, lines 40-65]

Claim 27:

Boutterin discloses wherein the disturbance comprises a voltage sequence applied during powering up of the electronic device [COUPURE A, col 5, line 37]

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boutterin in view of US Pat No 5,621,742 issued to Yoshino (hereafter Yoshino).

Claims 19 and 29:

Boutterin discloses the elements of claim 18/28 as noted above but does not disclose wherein the disturbance is a rising pulse having a maximum voltage which is controllable. Yoshino discloses wherein the disturbance is a rising pulse having a maximum voltage which is controllable [Fig 4]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Boutterin to include wherein the disturbance is a rising pulse having a maximum voltage which is controllable as taught by Yoshino for the purpose of simulating an aging test [Yoshino, abstract]

Claims 21 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boutterin in view of US Pat No 5,386,183 issued to Cronvich et al (hereafter Cronvich).

Claim 21 and 31:

Boutterin discloses the elements of claims 18/28 as noted above but does not disclose wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC. Cronvich discloses wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC [Fig 3 and col 12, lines 23-26]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Boutterin to include wherein the constant power supply voltage is selected from the group of voltages consisting of +5 VDC and +12 VDC as taught by Cronvich for the purpose of providing a power source suitable for many microcomputer and logic circuits [col 12, lines 23-26].

Claims 23 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bouterin in view of US Pat No 4,764,652 issued to Lee et al (hereafter Lee).

**Claims 23 and 33:**

Bouterin discloses the elements of claims 18 and 22/ 28 and 32 as noted above but does not disclose wherein the additional voltage is +24VDC. Lee discloses +24VDC [col 1, lines 55-60]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bouterin to include wherein the additional voltage is +24VDC as taught by Lee for the purpose of including a power supply voltage that is used for telecommunications equipment [col 1, lines 55-60].

***Response to Arguments***

Applicant's arguments filed 9/28/2005 with respect to claim 18-36 have been considered but are moot in view of the new ground(s) of rejection. Nevertheless, the following argument presented by applicant is considered below.

**Applicant Argues:**

Applicant states in the last paragraph of page 11:  
Baumgartner teaches or suggests nothing about elements/limitations such as “circuitry configured to introduce disturbances into the constant power supply voltage applied to the electronic device, a disturbance configured to simulate a disruption in the nominal power supply voltage.”

**Examiner Responds:**

Examiner is partially persuaded. The written description of the present invention does not address (1) configuring a disturbance, and (2) simulating a disruption. As explained in above Office Action, examiner assumes that there is no difference between a voltage disturbance and a voltage disruption. Examiner maintains that it can be argued that Baumgartner's disclosure of a saw-tooth waveform, Fig 2, TP1 reads on the claim 1 limitation "a voltage disruption in the nominal power supply." The disclosure of Baumgartner is particularly relevant to claim 19 which recites "wherein the disturbance is a rising pulse having a maximum voltage which is controllable" and particularly to claim 20 which recites "wherein the disturbance is a low-going pulse having a minimum voltage being less than the nominal power supply voltage." Nevertheless, in a bona fide attempt to advance prosecution, examiner provides above new art rejection over Bouterin which clearly teaches a test apparatus which introduces interruptions in the power supply voltage.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday between 8:00 am and 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahić can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

1/9/2006

